



12/10/13

Technical Report for

Anderson, Mulholland & Associates

BMS-ICM, Humacao, PR

Biopile Phase 5

Accutest Job Number: JB53758

Sampling Date: 11/20/13

Report to:

Anderson, Mulholland & Associates

arice@amaiconsult.com

ATTN: Addison Rice

Total number of pages in report: 12



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads 'Nancy Cole'.

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Anderson, Mulholland & Associates

Job No: JB53758

BMS-ICM, Humacao, PR

Project No: Biopile Phase 5

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JB53758-1	11/20/13	13:41 NR	11/21/13	SO	Soil	A-2-9 (5.7-6.2)
JB53758-1D	11/20/13	13:58 NR	11/21/13	SO	Soil Dup/MSD	A-2-9 (5.7-6.2)MSD
JB53758-1S	11/20/13	13:51 NR	11/21/13	SO	Soil Matrix Spike	A-2-9 (5.7-6.2)MS
JB53758-2	11/20/13	13:46 NR	11/21/13	SO	Soil	A-2-9 (5.7-6.2)D
JB53758-3	11/20/13	13:58 NR	11/21/13	SO	Trip Blank Soil	TB 112013

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Anderson, Mulholland & Associates

Job No JB53758

Site: BMS-ICM, Humacao, PR

Report Date 12/4/2013 11:42:37 A

On 11/21/2013, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 1.1 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB53758 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO

Batch ID: VE9217

- The data for SW846 8260B meets quality control requirements.
- JB53758-2: Confirmation run.
- JB53758-1: Confirmation run.

Matrix: SO

Batch ID: VE9218

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB54013-1MS, JB54013-1MSD were used as the QC samples indicated.

Matrix: SO

Batch ID: VX6159

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB53799-1MS, JB53799-3DUP were used as the QC samples indicated.

Wet Chemistry By Method SM2540 G-97

Matrix: SO

Batch ID: GN95673

- The data for SM2540 G-97 meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

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Job Number: JB53758
Account: Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR
Collected: 11/20/13



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JB53758-1 A-2-9 (5.7-6.2)

Xylene (total)	632000	5900	1100	ug/kg	SW846 8260B
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JB53758-2 A-2-9 (5.7-6.2)D

Xylene (total)	1080000	3000	530	ug/kg	SW846 8260B
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JB53758-3 TB 112013

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

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Client Sample ID:	A-2-9 (5.7-6.2)	Date Sampled:	11/20/13
Lab Sample ID:	JB53758-1	Date Received:	11/21/13
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8260B SW846 5035		
Project:	BMS-ICM, Humacao, PR		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E210118.D	1	11/25/13	DP	11/22/13 09:00	n/a	VE9218
Run #2 ^a	E210085.D	1	11/24/13	DP	11/22/13 09:00	n/a	VE9217

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.0 g	5.0 ml	1.0 ul
Run #2	6.0 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	632000	5900	1100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	107%	59-130%
17060-07-0	1,2-Dichloroethane-D4	100%	104%	65-123%
2037-26-5	Toluene-D8	99%	105%	80-124%
460-00-4	4-Bromofluorobenzene	117%	113%	71-132%

(a) Confirmation run.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	A-2-9 (5.7-6.2)D	Date Sampled:	11/20/13
Lab Sample ID:	JB53758-2	Date Received:	11/21/13
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	SW846 8260B SW846 5035		
Project:	BMS-ICM, Humacao, PR		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E210119.D	1	11/25/13	DP	11/22/13 09:00	n/a	VE9218
Run #2 ^a	E210086.D	1	11/24/13	DP	11/22/13 09:00	n/a	VE9217

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.0 g	5.0 ml	2.0 ul
Run #2	6.0 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	1080000	3000	530	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	106%	59-130%
17060-07-0	1,2-Dichloroethane-D4	100%	103%	65-123%
2037-26-5	Toluene-D8	100%	106%	80-124%
460-00-4	4-Bromofluorobenzene	118%	117%	71-132%

(a) Confirmation run.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	TB 112013	Date Sampled:	11/20/13
Lab Sample ID:	JB53758-3	Date Received:	11/21/13
Matrix:	SO - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	BMS-ICM, Humacao, PR		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X142335.D	1	11/24/13	NT	n/a	n/a	VX6159
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		59-130%
17060-07-0	1,2-Dichloroethane-D4	95%		65-123%
2037-26-5	Toluene-D8	103%		80-124%
460-00-4	4-Bromofluorobenzene	103%		71-132%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # 797206179540
Accutest Quote #
Bottle Order Control # KP-11 11/2/2013 - 54
Accutest Job # TB53758

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)										Matrix Codes			
Company Name Anderson Mulholland & Assoc.		Project Name BMS - Biopile Phase 5		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">VOC 8260 (See Note)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">No Solids</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">* 3 (lower) on 11/1/13</div> </div>										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank			
Street Address 110 Corporate Park Dr.		Street															
City State Zip White Plains, NY 10604		City State Hummagoo PR															
Project Contact Terry Taylor		Project #															
Phone # 914-257-0400, ext 309		Client Purchase Order #															
Sample(s) Name(s) Nestor M. Rivera		Project Manager		Attention:													
Field ID / Point of Collection		Collection		Number of preserved Bottles												LAB USE ONLY	
MEQ (DI Val)		Date	Time	Sampled by	Matrix	# of bottles	HQ	NASH	HMOS	H2SO4	NONE	DI Water	MEOH	ENCORE			
A-2-9 (5.7-6.2)		11/20/13	1341	SO	4											-1	
A-2-9 (5.7-6.2) B			1346	SG	4											-2	M32 T3
A-2-9 (5.7-6.2) MS			1351	SO	4											-1	14K3
A-2-9 (5.7-6.2) MSD			1358	SO	4											-1	4021
TB 11/20/13		835	11/20/13	1403	TB	1										-3	
Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Data Deliverable Information										Comments / Special Instructions			
<input type="checkbox"/> Std. 10 Business Days <input checked="" type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> other		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input checked="" type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C"		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other										Lab TB 11/1/2013 Vial # 835 Voc: Xylene			
Emergency & Rush T/A data available via Lablink		Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data															
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished By: 1 [Signature]		Date Time: 11/20/13 1417		Received By: 2 [Signature]		Date Time: 11/20/13		Relinquished By: 3 [Signature]		Date Time: 11/20/13 0845		Received By: 4 [Signature]		Date Time:		Received By: 5 [Signature]	
Relinquished By: 3 [Signature]		Date Time:		Received By: 4 [Signature]		Date Time:		Relinquished By: 5 [Signature]		Date Time:		Received By: 6 [Signature]		Date Time:		Received By: 7 [Signature]	
Custody Seal # 302		Intact <input checked="" type="checkbox"/> Not intact <input type="checkbox"/>		Preserved where applicable <input type="checkbox"/>		On Ice <input checked="" type="checkbox"/>		Cooler Temp. 1.1°C IP									

2A

JK

JB53758: Chain of Custody

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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB53758 **Client:** _____ **Project:** _____
Date / Time Received: 11/21/2013 **Delivery Method:** _____ **Airbill #s:** _____
Cooler Temps (Initial/Adjusted): #1: (1.1/1.1); 0

Cooler Security

	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:	_____		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments